E. TMDLs in San Gabriel River Watershed Management Area

- 1. San Gabriel River Metals and Impaired Tributaries Metals and Selenium TMDL (USEPA established)
 - a) Permittees subject to the provisions below are identified in Table E.
 - b) Permittees shall comply with the following grouped¹ wet weather² water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to all upstream reaches and tributaries of the San Gabriel River Reach 2 and Coyote Creek:

Water Body	Effluent Limitation Daily Maximum (kg/day)			
	Copper	Lead	Zinc	
San Gabriel Reach 2		81.34 x daily storm volume (L)		
Coyote Creek	24.71 x daily storm volume (L)	96.99 x daily storm volume (L)	144.57 x daily storm volume (L)	

c) Permittees shall comply with the following grouped¹ dry weather water quality-based effluent limitations as of the effective date of this Order, expressed as total recoverable metals discharged to San Gabriel River Reach 1, Coyote Creek, San Gabriel River Estuary, and San Jose Creek Reach 1 and Reach 2:

Water Body	Effluent Limitation Daily Maximum	
	Copper	Selenium
San Gabriel Reach 1	18 ug/L	
Coyote Creek	0.941 kg/day	
San Gabriel River Estuary	3.7 ug/L	
San Jose Creek Reach 1 and 2		5 ug/L

2. Legg Lake Trash TMDL

- a) Permittees subject to the provisions below are identified in Table E.
- b) Permittees shall comply with the final water quality-based effluent limitation of zero trash discharged to Legg Lake no later than March 6, 2016.
- c) If the Permittees choose to comply with the water quality-based effluent limitations by implementing an Executive Officer certified full capture system on conveyances that discharge to Legg Lake through a progressive

¹ The wet weather and dry weather water quality-based effluent limitations are group-based and shared among all MS4 Permittees, which includes LA MS4 Permittees, Long Beach MS4 Permittees, Orange County MS4 Permittees and Caltrans.

and Caltrans.

² In San Gabriel River Reach 2, wet weather TMDLs apply when the maximum daily flow of the river is equal to or greater than 260 cfs as measured at USGS station 11085000, located at the bottom of Reach 3 just above the Whittier Narrows Dam. In Coyote Creek, wet weather TMDLs apply when the maximum daily flow in the creek is equal to or greater than 156 cfs as measured at LACDPW flow gauge station F354-R, located at the bottom of the creek, just above the Long Beach WRP.

- implementation schedule of full capture devices, they will be deemed in compliance with the water quality-based effluent limitations.
- d) Permittees that choose to comply via a full capture compliance strategy must demonstrate a phased implementation of full capture devices attaining interim effluent limitations over the following 8-year period until the final effluent limitation of zero is attained:

	Effluent Limitation	
Deadline	Drainage Area covered by Full Capture Systems	
	(%)	
March 6, 2008	0	
March 6, 2012	20	
March 6, 2013	40	
March 6, 2014	60	
March 6, 2015	80	
March 6, 2016	100	

Legg Lake Trash Effluent Limitations³ (gallons of uncompressed trash per year)

Permittees	Baseline ⁴ (100%)	3/6/2012 (80%)	3/6/2013 (60%)	3/6/2014 (40%)	3/6/2015 (20%)	3/6/2016 ⁵ (0%)
Los Angeles County	2400.03	1920.02	1440.02	960.01	480.01	0
Los Angeles County Flood Control District	24.05	19.24	14.43	9.62	4.81	0
City of El Monte	509.48	407.58	305.69	203.79	101.90	0
City of South El Monte	3896.76	3117.41	2338.06	1558.70	779.35	0

³ Water quality-based effluent limitations are expressed as allowable trash discharge relative to baseline Waste Load Allocations specified in Table XX of the Basin Plan.

The Regional Water Board has determined the following baseline water quality-based effluent limitations for the

Permittees based on the estimated trash generation rate of 6677 gallons of uncompressed trash per square mile per year.

⁵ Permittees shall achieve their final effluent limitation of zero trash discharge for the year and every year thereafter.

- e) Permittees shall comply with the interim and final water quality-based effluent limitations for trash in 2(b) and 2(c) above per the provisions in Part 7.X [Permit Provisions to Implement Trash TMDLs].
- f) If a Permittee opts to derive site specific trash generation rates through its Trash Monitoring and Reporting Plan (TMRP), the baseline limitation shall be calculated by multiplying the point source area(s) by the derived trash generation rate(s).
- 3. Los Angeles Area Lakes TMDLs⁶ (USEPA in progress)
 - a) Legg Lake System Nutrient TMDL
 - (1) Permittees subject to the provisions below are identified in Table E.
 - (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area. The annual mass-based allocation shall be equal to a monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the following annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Flow (ac- ft/yr)	Total Phosphorus (lb- P/yr) ^{7,8}	Total Nitrogen (lb-N/yr) ^{6,7}
Northwestern	County of Los Angeles	33.5	53.6	148.7
Northwestern	South El Monte	308	526.3	1,500.6
Northeastern	El Monte	122	226.6	590.3
Northeastern	County of Los Angeles	8.18	12.8	39.2
Northeastern	South El Monte	287	498.7	1,394.8

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:
 - The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.

⁸ Measured at the point of discharge.

⁶ Los Angeles Area Lakes TMDL includes multiple watershed management areas.

⁷ Measured as a summer average (May – September) and annual average.

- The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
- U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
- The concentration-based receiving water limits must be met in the lake. However, if the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets are met, then the total phosphorus and total nitrogen limits are considered attained.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{9,10}	Total Nitrogen Monthly Average (mg-N/L) ^{8,9}
Northwestern	County of Los Angeles	0.1	1.0
Northwestern	South El Monte	0.1	1.0
Northeastern	El Monte	0.1	1.0
Northeastern	County of Los Angeles	0.1	1.0
Northeastern	South El Monte	0.1	1.0

- b) Puddingstone Reservoir Nutrient TMDL
 - Permittees subject to the provisions below are identified in Table E.
 - (2) Permittees may be deemed in compliance with water quality-based effluent limitations during both wet and dry weather by demonstrating reduction of total nitrogen and total phosphorous on an annual mass basis measured at the storm drain outfall of the Permittee's drainage area. The annual mass-based allocation shall be equal to a monthly average concentrations of 0.1 mg/L total phosphorus and 1.0 mg/L total nitrogen based on approved flow conditions. Permittees shall comply with the annual mass allocation based on current flow conditions as of the effective date of this Order:

Subwatershed	Permittee	Total Phosphorus (lb-P/yr) ^{11,12}	Total Nitrogen (lb-N/yr) ^{10,11}
Northern	Claremont	169	745
Northern	County of Los Angeles	741	829
Northern	La Verne	2,772	11,766
Northern	Pomona	6.30	28.3
Northern	San Dimas	31.1	137

⁹ Measured as an in-lake concentration.

¹⁰ Measured as a summer average (May – September) and annual average.

¹¹ Measured as a summer average (May – September) and annual average.

¹² Measured at the point of discharge.

- (3) The following concentration based water quality-based receiving water limitations apply during both wet and dry weather if:
 - The responsible jurisdiction requests that the concentration-based receiving water limits apply and provides to U.S. EPA and the Los Angeles Water Board a Lake Management Plan describing actions that will be implemented and cause the applicable water quality criteria for ammonia, dissolved oxygen, and pH targets to be met.
 - The Los Angeles Water Board Executive Officer approves the request. The concentration-based receiving water limitations are not to be exceeded as a summer average (May-September) and annual average.
 - U.S. EPA does not object to the Los Angeles Water Boards decision within sixty days of receiving notice.
 - The concentration-based receiving water limits must be met in the lake.

Subwatershed	Permittee	Total Phosphorus Monthly Average (mg-P/L) ^{13,14}	Total Nitrogen Monthly Average (mg-N/L) ^{12,13}
Northern	Claremont	0.1	1.0
Northern	County of Los Angeles	0.1	1.0
Northern	La Verne	0.1	1.0
Northern	Pomona	0.1	1.0
Northern	San Dimas	0.1	1.0

- Puddingstone Reservoir Mercury TMDL c)
 - Permittees subject to the provisions below are identified in Table E.
 - Permittees shall comply with the following water quality-based effluent limitations during both wet and dry weather as of the effective date of this Order:

Subwatershed	Permittee	Total Mercury (g-Hg/yr) ^{15,15}	
Northern	Claremont	0.674	
Northern	County of Los Angeles	2.79	
Northern	La Verne	10.6	
Northern	Pomona	0.026	
Northern	San Dimas	0.109	

¹³ Measured as an in-lake concentration.

¹⁴ Measured as a summer average (May – September) and annual average.
15 Measured at the point of discharge.

- d) Puddingstone Reservoir PCBs TMDL
 - Permittees subject to the provisions below are identified in Table E.
 - (2)Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{13,16}	Total PCBs in the Water Column (ng/L) ^{13,14}
Northern	Claremont	0.59	0.17
Northern	County of Los Angeles	0.59	0.17
Northern	La Verne	0.59	0.17
Northern	Pomona	0.59	0.17
Northern	San Dimas	0.59	0.17

(3)Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total PCBs associated with Suspended Sediment (ug/kg dry weight) ^{17,16}	Total PCBs in the Water Column (ng/L) ^{15,17}
Northern	Claremont	59.8	0.17
Northern	County of Los Angeles	59.8	0.17
Northern	La Verne	59.8	0.17
Northern	Pomona	59.8	0.17
Northern	San Dimas	59.8	0.17

- Puddingstone Reservoir Chlordane TMDL
 - Permittees subject to the provisions below are identified in Table E. (1)
 - Permittees shall comply with the following water quality-based effluent (2)limitations as of the effective date of this Order:

Applied as an annual average.
 Measured at the point of discharge.
 Applied as a 3-year average.
 Appled as an annual average.

Subwatershed	Permittee	Total Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{15,17}	Total Chlordane in the Water Column (ng/L) ^{15,17}
Northern	Claremont	0.75	0.57
Northern	County of Los Angeles	0.75	0.57
Northern	La Verne	0.75	0.57
Northern	Pomona	0.75	0.57
Northern	San Dimas	0.75	0.57

Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Chlordane associated with Suspended Sediment (ug/kg dry weight) ^{18,19}	Chlordane in the Water Column (ng/L) ^{19,20}
Northern	Claremont	3.24	0.57
Northern	County of Los Angeles	3.24	0.57
Northern	La Verne	3.24	0.57
Northern	Pomona	3.24	0.57
Northern	San Dimas	3.24	0.57

- Puddingstone Reservoir Dieldrin TMDL
 - Permittees subject to the provisions below are identified in Table E.
 - Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{19,20}	Dieldrin in the Water Column (ng/L) ^{19,20}
Northern	Claremont	0.22	0.14
Northern	County of	0.22	0.14

Applied as a 3-year average.
 Measured at the point of discharge.
 Applied as an annual average.

	Los Angeles		
Northern	La Verne	0.22	0.14
Northern	Pomona	0.22	0.14
Northern	San Dimas	0.22	0.14

(3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Dieldrin associated with Suspended Sediment (ug/kg dry weight) ^{18,19}	Dieldrin in the Water Column (ng/L) ^{19,20}
Northern	Claremont	1.90	0.14
Northern	County of Los Angeles	1.90	0.14
Northern	La Verne	1.90	0.14
Northern	Pomona	1.90	0.14
Northern	San Dimas	1.90	0.14

- g) Puddingstone Reservoir DDT TMDL
 - (1) Permittees subject to the provisions below are identified in Table E.
 - (2) Permittees shall comply with the following water quality-based effluent limitations as of the effective date of this Order:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{21,22}	4-4' DDT in the Water Column (ng/L) ^{21,22}
Northern	Claremont	3.94	0.59
Northern	County of Los Angeles	3.94	0.59
Northern	La Verne	3.94	0.59
Northern	Pomona	3.94	0.59
Northern	San Dimas	3.94	0.59

(3) Permittees may comply with the following alternative effluent limitations if the responsible jurisdictions submit to U.S. EPA and the Regional Board material describing that the fish tissue target of 3.6 ppb wet weight has been met for the preceding three or more years. A

²¹ Measured at the point of discharge.

²² Applied as an annual average.

demonstration that the fish tissue target has been met in any given year must at a minimum include a composite sample of skin of fillets from at least five common carp each measuring at least 350 mm in length and it is approved by the Los Angeles Water Board Executive Officer and U.S. EPA does not object within 60 days of receiving notice:

Subwatershed	Permittee	Total DDT associated with Suspended Sediment (ug/kg dry weight) ^{21,23}	4-4' DDT in the Water Column (ng/L) ^{21,22}
Northern	Claremont	5.28	0.59
Northern	County of Los Angeles	5.28	0.59
Northern	La Verne	5.28	0.59
Northern	Pomona	5.28	0.59
Northern	San Dimas	5.28	0.59

²³ Applied as a 3-year average.